

PROSTATE CANCER ACTION GROUP (S.A.) INC

Affiliated with
Prostate Cancer Foundation of
Australia



ABN 26 499 349 142

NEWSLETTER

The views expressed in this newsletter are not necessarily those of the Group. This newsletter is produced for the benefit of members of this Group, for general information, and articles are not intended as professional advice. This Group does not provide professional advice, nor does it endorse any particular product or service. It is recommended that any person needing advice on any health matter should consult their health professional without delay.

Website: www.pcagsa.org.au

APRIL 2005

Chairman's Report – April 2005

Greater Interest in Prostate Cancer Awareness

My assessment of the first 3 months of 2005 is a greater interest in prostate cancer awareness amongst the community. I base this observation on the comments and feed back received from the 3 community events the Action Group has been involved in this year.

First of all, the very successful Awareness Evening at Mitcham. Registrations for this Event were taken from our private phone and I had many interesting discussions as people registered plus a great deal of positive feed back following the Evening.

Secondly, Man Alive 2005 at Semaphore was another very successful day with those of our members present having many chats to people as pamphlets were taken.

Thirdly, the Mount Compass Field Day. This was a little quieter but still well worthwhile attending

I feel there is definitely an upsurge of interest and it is most important the BE A MAN Launch takes place in South Australia at the earliest possible date. I realise delays have occurred because of the greater than expected interest in the initial Launch. However I would hate to think further delays would cause us to miss out on the increased momentum which seems to be present.

Awareness Evenings

Yorke Peninsula

Arrangements have now been confirmed for an Evening at Kadina on Friday 19th August 2005. The venue is the conference room in The Farm Shed Museum and Tourist Centre – Moonta Road Kadina (Capacity – 100 people). I have spoken to the visiting urologist, Dr Zenon Herzberg and he is happy to speak for us. Tim Garfield, a Senior Community Nurse at the Wallaroo Community Health Centre is enthusiastic about providing assistance for us in promoting the Evening. I understand the population of the 3 Copper Triangle Towns, Kadina, Wallaroo and Moonta exceeds 12,000 so there are prospects of a good attendance.

Adelaide Metropolitan Area

I am pleased to report the Prostate Cancer Call-In will take place as usual with the anticipated date being the 8th September 2005. The Cancer Council South Australia is happy to provide assistance to our group in presenting an Awareness Evening and this will probably be conducted about a week after the Call- In. The date will be discussed at our April meeting.

Grant Applications

An application has been lodged with the Department of Family & Community Services for a Volunteer Small Equipment Grant under which we seeking a video projector. Also we have applied for a Grant under The Cancer Support Group Grants Program through The Department of Health and Ageing.

I have submitted an assessment plus an acquittal of funds to the City of Mitcham in relation to the Awareness Evening conducted on the 23rd February.

Man Alive 2005

This Event was held at the Semaphore Foreshore on Sunday 13th March. Members attending were Trevor & Coralie, Jeff & Theban, Pat & Robert. The location at Semaphore was excellent and with great weather the day proved a big success. I believe the organisers would have been very happy with the attendance which appeared to be substantially greater than last year.

We had a range of pamphlets on display for people to browse at and take if they wished. A very pleasing aspect was the steady flow of people to our tent, many of whom were very interested in prostate cancer problems and the need to be informed. The day left us with the feeling that prostate cancer awareness is on the move.

Thanks again to Pat for organising our site.

Mount Compass Field day

The Mount Compass Field Day held on the 30th March proved to be another worthwhile activity for our Group. Those attending were Trevor & Coralie, Ian, Theban & Jeff. Mount Compass is a very pleasant area although the day itself was quite warm. Particularly early in the day there was a steady stream to our tent although it did quieten later. I understand the overall attendance was less than last year. Once again we felt there was a genuine interest in prostate cancer issues.

Thanks to Trevor for arranging the site plus the tent and table.

Prostate SA

I understand a further meeting is being arranged and details are likely to be advised within the next 7 days.

Human Services Finder – <http://www.hsfinder.sa.gov.au>

The SA Government has released a new, free Internet-based service directory – the Human Services Finder – allowing the South Australian public to quickly locate health and other community services in their area. A brochure giving more details will be supplied to members at the April meeting.

Warning on Hidden Killer

This was the headline to a column that appeared in the Advertiser on the 21st March 2005. It referred to heart disease killing 5 times more women than breast cancer. Toward the end of the article reference was made to a survey conducted on behalf of the Heart Foundation of Australia which found 4% of people surveyed thought prostate cancer killed more women than heart disease. How about that?? *Jeff Roberts*

CELEBREX MAY SLOW CANCER THAT VIOXX CAN'T

**Steven Reinberg* HealthDay Mar. 3, 2005*

Celebrex, one of the painkillers under fire for increasing heart attack and stroke risk, may slow certain cancers in a way that its cousin, Vioxx, does not, according to new preliminary research. Both drugs, known as COX-2 inhibitors, have been shown to inhibit the growth of tumors that depend on the COX-2 enzyme, as happens with some prostate and breast cancers.

But a new study finds that Celebrex (celecoxib) appears to fight prostate cancer on another front, by blocking a key protein that is essential to the replication of cancer cells. This latest report appears in the March 1 issue of *Clinical Cancer Research*. "Celecoxib can mediate anti-tumor effects by mechanisms in addition to targeting COX-2, which is its known target," said lead researcher Andrew Dannenberg, director of cancer prevention at the Weill Medical College of Cornell University in New York City. "This suggests that the agent's overall anticancer activity may reflect COX-2 inhibition and other properties."

In the study, Dannenberg's team treated human prostate cancer cells that did not have the COX-2 enzyme with Celebrex. The researchers found that cells treated with the drug did not reproduce as quickly as similar untreated cells.

However, when the researchers tried the same experiment using Vioxx, they found the cancer cells continued to reproduce. "This makes the point that all COX-2 inhibitors are not created equal," Dannenberg said.

Dannenberg noted that his work is not a clinical study, and that the use of Celebrex in fighting cancer needs to wait for the outcome of several ongoing clinical trials. (*ABC News*)

How a nerve graft can put a spring in your step

If it is possible to pass through a cancer experience and emerge unchanged, then Greg O'Meara is a living example of it. Just over two years ago he was diagnosed with aggressive prostate cancer. Today, the cancer is gone and the only reminder is a small numb patch on one foot.

He's hardly aware of the numbness and says it doesn't impede the regular 12 kilometre run he does for triathlon training program. At 41, he feels as fit and as well as is possible for his age.

During the operation to remove his cancerous prostate, a nerve the size of a thin shoelace was removed from his lower leg. It was then used to replace one of the erectile nerves that he lost during the operation. This graft gave him the possibility of eventually regaining full potency.

After 18 months, life was very much back to normal and these days O'Meara says everything is so automatic, he doesn't even think about the process. In fact, cancer is not part of his consciousness.

"I was never sick and didn't have any symptoms. I never had any of those things one associates with cancer like chemotherapy, radiotherapy and hair loss. I just never felt like a cancer patient- Of course, I had a major operation but in my head I rationalized it by saying I could just as easily have been having my appendix out. I consider myself incredibly lucky to have been diagnosed so early."

Just before Christmas 2002, O'Meara, who runs a hotel in Margaret River, Western Australia, went for his routine annual check-up. "As part of the check, the GP happened to tick a box to test for prostate specific antigen. I didn't even know what that was or that he was testing for it.

"Later he told me everything was fine except my PSA was a little high - not hellishly high but a bit more than it should be. In case it was a maverick score, he retested me and got about the same result.

"Although it was probably not serious, the GP suggested I go up to Perth for a biopsy I remember, it was virtually Christmas Eve, and while the radiologist doing the procedure, he was saying it was probably nothing because I was only 39. I wasn't worried.

"Just after New Year, we'd been out to a festive lunch with friends at Vasse Felix, one of the better wineries down here, and we'd all come back to our place. We were sitting around feeling pretty relaxed when the phone went

"It was my specialist from Perth. He said there was some cancer in my prostate. It's hard to describe the feelings but suddenly things became quite eerie."

The specialist posted down some reading matter and in their subsequent discussions about treatment options, he suggested O'Meara travel to Sydney for a sural nerve graft. I was on a pretty steep learning curve, so it was all new to me, but in the end the decision made itself.

O'Meara and his wife, who was seven months pregnant with their third child, flew to Sydney and went directly to St George Hospital. There he was operated on by Paul Cozzi, an urologist who had learned the technique at Memorial Sloan Kettering Cancer Centre, New York. He performed the first Australian case on his return in 2000.

Cozzi, who is a senior lecturer in surgery at the University of NSW, has since completed more than 90 of these grafts, and presented his results at the Australian Urological Society's scientific meeting in Melbourne last month.

He showed that up to 70 per cent of men who lose one nerve and have a replacement graft can expect to recover their potency.

In healthy men, an erection is supported by two nerves that run down either side of the prostate. If both nerves are spared during radical prostate surgery, there is a 70 to 80 per cent probability the man will retain his potency.

If one is removed, the chance of recovery is only 30 per cent. If both nerves go, the probability of potency is zero.

In younger men, Cozzi says a single graft can mean the difference between needing Viagra all the time and not needing it at all.

In older men it may mean the difference between a satisfactory erection using Viagra and no erection at all, with the only alternative being penile injections, which many couples find unpleasant.

Last year, Manish Patel, a urological oncologist from Sydney's Westmead Hospital, presented the world's largest series of sural nerve grafts - 145 cases -- at a meeting of the American Urological Association.

He, too, learnt the procedure at Memorial Sloan Kettering and says it can take three years for the grafted nerves to function properly.

In the first year, the results look dismal. In the second year, there is dramatic improvement, and by the end of the third year, men generally do well.

Initially this procedure was used on men who had both nerves removed during surgery. Patel says an “amazing” 40 per cent of these men regained potency after a double graft. On the basis of this success, single grafts were tried.

Cozzi and Patel are now planning to combine their results into one series. They have shown the procedure is safe and effective, with minimal risk of complications.

But, they say it is not suitable for men who have pre-existing impotence or who will need subsequent radiotherapy or hormonal therapy.

When they talk about restoring potency, they mean spontaneous potency without the *need* for medication or devices.

Although they were prescribed, O'Meara rarely used potency drugs because they gave him headaches. Rather, he and his wife decided to let nature (and science) take its course while they remained positive that it would.

“On the way through we had our fair share of tears and a bit of 'why me', but overall we were very practical in our decision making.”

He regards the operation as a comprehensive success and is now doing so well, that from having his PSA checked every six months, his specialist says he need only do it annually. (*Jill Margo, AFR, 7/4, p59*)

HIGH LEVELS OF VITAMIN E CUT PROSTATE CANCER RISK

Mar. 2, 2005 - NEW YORK (Reuters Health) - High blood levels of the major vitamin E components, alpha- and gamma-tocopherol, seem to cut the risk of prostate cancer by about 50 percent each, a study shows.

The findings are based on an analysis of 100 individuals with prostate cancer and 200 cancer-free "controls" participating in the Alpha-Tocopherol, Beta-Carotene Cancer Prevention (ATBC) Study, which included nearly 30,000 Finnish men.

Men with the highest levels of alpha-tocopherol in their blood at baseline were 51 percent less likely to develop prostate cancer than those with the lowest levels, report investigators in this week's Journal of the National Cancer Institute (NCI).

Similarly, men with the highest levels of gamma-tocopherol were 43 percent less likely to develop the disease compared with men with the lowest levels.

Further analysis showed that the link between high tocopherol levels and low cancer risk was stronger among subjects using alpha-tocopherol supplements than among non-users.

This supports the original findings from the ATBC study, which showed that daily vitamin E supplementation reduced the risk of prostate cancer by 32 percent.

Dr. Demetrius Albanes, from the NCI in Bethesda, Maryland, and colleagues believe that the antioxidant activity of vitamin E may be particularly important to the associations they observed in the current study because oxidative stress has been tied to the development of prostate cancer.

However, alpha-tocopherol has other non-antioxidant properties, such as enhancement of the immune response, which may also play a role in the benefits seen, they add.

SOURCE: Journal of the National Cancer Institute, March 2, 2005.

NEW DEBATE ON CHEMOTHERAPY BENEFITS

A new Australian study suggests benefits of chemotherapy drugs are being over-sold to cancer patients and an urgent review is needed to assess their cost-effectiveness and impact on quality of life. Study lead author Dr. Graeme Morgan, director of radiation oncology at Royal North Shore Hospital in Sydney, said cancer patients were being led to believe that newer chemotherapy drugs would help them live longer, despite there being no great advances in survival rates with chemotherapy in the past 20 years.

In a literature review, Dr. Morgan found there was only a minimal survival benefit when adults were treated with cytotoxic chemotherapy. While cancer patients in Australia had an average 60% five-year survival rate, chemotherapy contributed to only about 2% of this (*Clinical Oncology 2004, 16:549-60*). He said most chemotherapy drugs were given as palliation, without clear evidence of efficacy and at a spiraling cost, meanwhile raising false hopes for the vulnerable patient. But Dr. Raymond Snyder, oncologist at St Vincent's Hospital in Melbourne, disputed the conclusions, saying the study had included cancers for which chemotherapy was rarely or never used, and had not included some newer and more effective drugs. (*Medical Observer, 21/1 p7*)

VITAMIN E: WHICH TYPE BEST FOR PROSTATE CANCER?

Some Foods are Better Sources Than Others for a Key Form of Vitamin E

(By Miranda Hitti WebMD Medical News)

March 1, 2005 -- Vitamin E supplements may not deserve all the credit for the vitamin's reputation for curbing prostate cancer.

Vitamin E is a family of various antioxidants. Gamma tocopherol is the most prevalent form of vitamin E in the American diet. Another form of vitamin E, known as alpha tocopherol, is the predominant form found in the blood.

The amount of vitamin E in the blood -- before popping vitamin E supplements -- also plays a role in prostate cancer prevention, says a new study. In the study, men with the highest blood levels of the two forms of vitamin E had the lowest prostate cancer risk. Their risk of prostate cancer was even lower when they took alpha tocopherol supplements.

Rate Your Diet for Vitamin E.

With that in mind, scan your kitchen (or take-out menu) for items containing vitamin E.

Do you snack on almonds, hazelnuts, or sunflower seeds? Eat a lot of spinach? Cook with olive oil and canola oil? If so, give yourself high marks. Those are some of the healthiest vitamin E food sources, Maret G. Traber, PhD, tells WebMD.

Those foods contain vitamin E's alpha tocopherol form. But most people get vitamin E from soybean oil and corn oil, says Traber, an Oregon State University professor of nutrition and exercise science. Soybean and corn oils favor the vitamin's gamma tocopherol form. "The body requires alpha tocopherol. It gets rid of gamma tocopherol," Traber tells WebMD.

Even if you eat an ideal diet, it's hard to get enough vitamin E from foods alone. For instance, a cup of cooked spinach has about 1 mg of alpha tocopherol, but most adults need 15 mg per day, says Traber, who's also on staff at the Linus Pauling Institute.

Even Popeye might balk at eating 15 cups of spinach every day. Nuts may not be the perfect answer, either. Although rich in vitamin E, nuts are also laden with calories.

Best Results From Food and Supplements?

The new findings come all the way from Finland. That's where a large study showed a 32% drop in prostate cancer cases among men who took daily alpha tocopherol supplements for five to eight years when compared with men who took a placebo.

Those results were first reported in 1998. Recently, experts from the National Cancer Institute took another look at the data. This time, they focused on the two forms of vitamin E and their blood levels before taking supplements.

The original study included more than 29,000 Finnish male smokers aged 50-69. From that group, the researchers picked 100 participants who had developed prostate cancer, matching them to 200 healthy men. At the study's start, the men's blood levels of alpha and gamma tocopherol were measured.

The researchers found that the men with the highest blood levels of alpha and gamma tocopherol had lower prostate cancer risk. Men with the highest levels of both forms of the vitamin were 30%-40% less likely to develop prostate cancer as those with the lowest levels. The reduction in risk of prostate cancer was stronger in the men who took vitamin E supplements.

There's a little fine print to note. The men diligently took their vitamin E pills for five to eight years, getting about 50 mg of alpha tocopherol a day. That's about three times the Recommended Dietary Allowance. When the original 1998 study was published, the National Cancer Institute noted that it has never recommended that Americans take supplements.

The men also ate more alpha than gamma tocopherol. But gamma tocopherol is the main form of vitamin E in the American diet, say the researchers, who included Demetrius Albanes, MD, of the National Cancer Institute.

(The study appears in the March 2 edition of the /Journal of the National Cancer Institute © 2005 WebMD Inc. All rights reserved.)

PROSTATE CANCER VACCINE SHOWS PROMISE

**By Steven Reinberg*/HealthDay Reporter/*

FRIDAY, March 4 (HealthDayNews) -- A new vaccine that dramatically slows the recurrence of prostate cancer by marshaling the patient's own immune system to fight tumor cells looks promising in an early trial, researchers report. This new vaccine uses the patient's own dendritic cells, white blood cells that activate the immune system, to

connect antigens to the body's killer cells, called T-cells. The antigen the researchers targeted is called telomerase, which is secreted by all cancer tumors.

Antigens are protein parts made by viruses or bacteria. These antigens trigger the immune system to attack these invaders. A trick in developing cancer vaccines is training the immune system to recognize tumors as invading antigens.

"This is one of the first steps for the development of a universal cancer vaccine," said lead researcher Dr. Johannes Vieweg, an associate professor of urology and immunology at Duke University. "It may not only be effective in a single tumor system, like prostate cancer, but against many cancers, because telomerase is overexpressed in a variety of cancers."

In their study, Vieweg's team did tests to be sure the patient's immune T-cells were functioning and also monitored the number and types of T-cells during treatment.

Of the 20 patients in the trial, 19 had an increase in anti-telomerase T-cells (CD8 cells). Among nine patients, dendritic cells were genetically modified to increase the type of T-cells called CD4. All nine of these patients had an increased immune response, according to the report in the March 15 issue of the *Journal of Immunology*. Moreover, the researchers found that vaccination was linked to a reduction in tumor cells and also to a slowing of increasing PSA levels.

The team found that vaccination allowed the body to distinguish between normal and cancer cells, Vieweg said. "With pinpoint accuracy, we can actually eliminate tumor cells in the patient's body," he said. Vieweg said this study proved that their vaccine can stop cancer tumor activity without toxic side effects. "Unlike chemotherapy, we have a very specific drug that doesn't cause any side effects, but can stop tumor growth to some extent," he said.

The vaccine is designed to be used with patients who have failed usual treatments. Vieweg is quick to say that a cancer vaccine is not a cure, but rather a way to retard the growth of tumors, making cancer something patients can live with. "This is a very attainable and worthwhile goal, having something that delays disease for a long time without having any side effects," Vieweg said.

Based on this finding from the Phase 1 trial, the research team is going on to a phase II trial to assess safety and efficacy, Vieweg said. "Hopefully, this will go all the way and become an important therapy in the future. We are inching toward an effective cancer vaccine. We are not there yet, but we can see the light at the end of the tunnel," he said. "Even if we can't cure cancer yet -- and no drug can do that at this point -- the second-best thing you can provide is hope."

One expert thinks this study is interesting, but whether or not the vaccine can really slow the progression of cancer in a large population is still up in the air.

"This is a potentially interesting antigen, because cancer cells depend on it for survival," said Dr. Howard L. Kaufman, vice chairman of surgical oncology at Columbia University, College of Physicians and Surgeons. "However, it is probably a very weak target."

In addition, Kaufman believes that whether or not the vaccine is really effective has not been proved yet. "It's a little disappointing that the clinical response was not better," Kaufman said. However, the study was too small to really judge the true clinical results of this vaccine, he noted.

Another expert and cancer vaccine researcher echoed Kaufman's remarks.

"This is an interesting paper which demonstrates that immune responses can be developed with vaccination strategies in patients with prostate cancer," said Dr. Eric Small, a professor of medicine at the University of California San Francisco.

"However, the study was not designed to evaluate clinical effectiveness," Small said. "The significance of this work is that it adds to the growing body of evidence that

prostate cancer is a reasonable target for immunologic manipulations, and provides the basis for further study." Small should know: In February, his team of researchers reported that another vaccine, called APC8015 (Provenge) extended survival in men with metastatic prostate cancer by 18 percent -- the first time an immune-based therapy has been proven to affect survival in these types of patients.

EARLY PROSTATE CANCER DETECTED IN MOLECULAR-BASED URINE TEST

PHILADELPHIA (April 2, 2000) -- Researchers at Fox Chase Cancer Center in Philadelphia, Pa. say prostate cancer can be detected in urine. The findings of a new study were presented today at the American Association for Cancer Research in San Francisco.

"Prostate cancer is curable if detected early and it is likely that there are cancer cells in body fluids years before cancer is clinically detectable. If we can find those cells, we can cure more prostate cancers," explained Paul Cairns, Ph.D. of Fox Chase Cancer Center.

Cairns and his colleagues at Johns Hopkins University (JHU), chose to screen urine DNA for a common, early genetic change unique to cancer cells called hypermethylation at the glutathione-S-transferase (GSTP1) gene using a sensitive PCR (polymerase chain reaction) test. GSTP1 hypermethylation is found in more than 90% of prostate cancers but not in normal tissues or in BPH, making it a very specific marker for the disease.

Investigators collected tumor samples and urine specimens from 28 men known to have surgically curable prostate cancers. Specimens were coded to prevent investigator bias. Of the 28 tumor DNAs, 22 showed GSTP1 methylation and could be compared with urine samples. For 6 of these 22 tumors, the corresponding urine DNA was also positive for GSTP1 methylation, confirming the potential of this test to detect curable prostate cancers. There were no false-positive results.

"We are optimistic that future research and continuing improvements in molecular technology will increase the detection rate. Screening tests should be reliable, inexpensive, and noninvasive. Urine tests meet these standards," said Dr. Cairns. "Furthermore, we already know from Dr. Sidransky's (JHU) work that a urine test can detect almost all bladder cancers and many kidney cancers. In the future, it's quite possible that the same urine specimen could be used to test for prostate, bladder and kidney cancer."

Fox Chase Cancer Center, one of the nation's first comprehensive cancer centers designated by the National Cancer Institute in 1974, conducts basic and clinical research; programs of prevention, detection and treatment of cancer; and community outreach. For more information about Fox Chase activities, visit the center's web site at: <http://www.fccc.edu>.

SOCIAL FACTORS MAKE FOR PROSTATE OUTCOMES

Social and geographic factors have a marked effect on the use of radical prostatectomy and survival in W.A. men with prostate cancer (*BJU International* 2005;95:51-58). Three year mortality was 22% higher in men first admitted to a rural rather than metropolitan hospital, 34% higher in the disadvantaged, 23% lower if treated in a private hospital and 18% lower in those with private health insurance. (*Australian Doctor*, 14/1 p15)

KEYHOLE PROSTATE SURGERY PROVES SUCCESSFUL

New Zealand urologists have reported their initial experiences with laparoscopic radical prostatectomy. Thirty patients had the lengthy operation which took an average of five hours. No one needed conversion to open surgery, one needed re-admission for a complication, and the last 10 patients in the series were discharged the day after surgery. After 6 months 83% of the patients were continent, and after 12 months only one patient had a biochemical recurrence of prostate cancer. (*Australian Doctor*, 17/12, p13)

EFFECT OF DOCETAXEL IN PATIENTS WITH HORMONE-DEPENDENT PROSTATE SPECIFIC ANTIGEN PROGRESSION AFTER LOCAL THERAPY FOR PROSTATE CANCER

Purpose: To evaluate Docetaxel in the treatment of patients with early-stage prostate cancer with prostate specific antigen (PSA) progression after local therapy without androgen ablation therapy.

Patients and Methods: Twenty-five patients with adenocarcinoma of the prostate with PSA progression despite local therapy were treated with 70mg/m² Docetaxel every 21 days.

Treatment was planned for eight cycles. Patients were followed up for effects on PSA, testosterone and toxicity.

Results: Twenty-three of 25 patients completed at least one full cycle of therapy. Ten (43%) of 23 patients demonstrated a decrease in PSA by > 50% for at least 4 weeks. The nadir decrease in PSA occurred beyond 150 days of therapy in most patients. Therapy was well tolerated. Grade 4 neutropenia with fever occurred in only six cycles (4.5%). Two patients required 25% dose reductions, both occurring with cycle 6, secondary to increased transaminases in one patient, and grade 3 lacrimation in the other patient. Two patients were removed after the first cycle of therapy due to toxicity (deep venous thrombosis, chest palpitations). Mean testosterone levels were not reduced in 17 patients assessed before and during therapy (P=.12).

Conclusion: This study demonstrated the activity of Docetaxel alone, without androgen ablation, in patients with PSA progression after completion of local therapy. Treatment with Docetaxel in this population with early disease progression was well tolerated, biochemically active and was not androgen ablative. Accrual to national phase III studies in early disease is now critical and should be strongly encouraged to determine the ability of early chemotherapy to improve survival. (from

<http://www.jco.org/cgi/content/abstract/JCO.2005.11.111v1>

MEN GET PROSTATE SCREEN, BAULK AT COLON CANCER TEST

NEW YORK (Reuters Health) - Men apparently find it quite acceptable to get a PSA test to screen for prostate cancer, but don't go along so readily with being screened for colorectal cancer, findings from a new study indicate.

Dr. Ruth Carlos wants doctors to approach PSA testing as a "teachable moment" for informing men about tests aimed at cutting colon cancer risk. "Men are already paying attention to their cancer risk in one area," she noted in a statement. "If we can take advantage of that consciousness to educate them about another cancer risk, it might lead to more early detection of colorectal cancer."

Carlos, at the University of Michigan in Ann Arbor, and her colleagues analyzed data from 22,304 men who participated in the 2002 Behavioral Risk Factors Surveillance Survey.

The analysis showed that 62 percent of men underwent prostate cancer screening, while just 48 percent went along with colon cancer screening, according to a report in the Journal of the American College of Surgeons.

The team found that men who had a PSA test were three times more likely to get a colon cancer test. "If we can turn the PSA test into an opportunity to encourage men to get their colons checked too, it would take advantage of the public demand for PSA testing," said Carlos.

She also pointed out that colorectal screening might pay bigger dividends than prostate screening. "Colon cancer screening is proven to be effective at reducing deaths from colon cancer, while the effectiveness of the PSA test in reducing mortality continues to be debated," Carlos explained.

SOURCE: Journal of the American College of Surgeons, February 2005. © Reuters 2005. All

LIST OF CANCER'S CAUSES GETS LONGER

(*By Darlene Superville*/The Associated Press)

WASHINGTON. The government is adding viruses for the first time to its list of known or suspected causes of cancer, including hepatitis B and C and a third virus that causes sexually transmitted diseases. Lead, X-rays and compounds in grilled meats also are joining the list.

It has been known that the hepatitis viruses can cause liver cancer and that some forms of the sexually transmitted human papillomavirus can cause cervical cancer. But they were added to the list yesterday only after officials decided to go beyond the report's historical focus on the occupational and environmental causes of cancer, said Dr. Christopher Portier, associate director of the National Toxicology Program, which

prepared the latest update. "We felt (the report) needed to be expanded to include other things in our general environment that can cause cancer," Portier said.

Dr. Michael Thun, who runs the American Cancer Society's epidemiological program, said adding the viruses was important. "These are human carcinogens and very important carcinogens," he said.

The list, which identifies 246 known or suspected cancer-causing agents, is intended to give people who may be exposed to any of the substances something to think about, he said. Take X-rays, added to the "known" category. "This is simply to remind them that when they are making a decision about an X-ray to think about it and talk it over with your physician," Portier said.

But the American College of Radiology faulted the addition of X-rays and gamma rays, saying it was misleading and could prompt patients to avoid getting needed care. "X-rays and gamma rays are not substances that the general public has access or exposure to and do not belong on a list of substances that pose a risk to people in the course of their normal, daily lives," Dr. James Borgstede, chairman of the radiology college's board of chancellors, said in a statement.

Also new to the suspected category are substances that form when meats are cooked or grilled at high temperatures. Studies suggest an increased cancer risk when foods containing them are eaten.

But "does that mean you have to throw out your barbecue grill?" asked Dr. Elizabeth Whelan, a critic of the list from the American Council on Science and Health, a consumer-education group. She said the list should include information on the types of exposures and dosages that cause cancer, as well as on the health benefits of some of the substances identified, such as tamoxifen, the breast-cancer treatment pill.

Portier said other agencies, such as the Environmental Protection Agency and the Food and Drug Administration, are responsible for determining exposure levels, dosages and other issues. "We think everything on this list is, in fact, relevant to people's daily lives and the public health of the country," he said.

The Report on Carcinogens, which federal law requires the health and human services secretary to update every two years, lists 58 "known" and 188 "reasonably anticipated" cancer-causing substances. It was prepared by the National Toxicology Program of the National Institute for Environmental Health Sciences. (*Seattle Times*)

LOOKING FOR CLUES TO PROSTATE CANCER

Prostate cancer incidence has been rising steadily to make it the most commonly diagnosed cancer, other than skin cancer, in Australian men.

The Menzies Research Institute is conducting a study to attempt to identify the genes responsible for hereditary prostate cancer. By doing that, we can better understand how the disease develops and help identify those who are more at risk of developing it. By focusing on families with many individuals with prostate cancer, the genetic area to be studied becomes a lot more manageable. The bigger the family, the easier it becomes. Researchers are using several cutting-edge technologies to discover which abnormalities are common to family with prostate cancer but rare in people who don't develop the disease. (*Hobart Mercury*, 9/2, p36)

FREEZING PROSTATE TUMOURS

*(WebMD) *A prostate cancer treatment that destroys tumors by freezing them may be as effective in the long term as surgery or radiation. "Patients who got this treatment often went back to their usual activities within two or three weeks," study researcher Fletcher Derrick Jr., MD, a urologist at Roper Hospital in Charleston, S.C., tells WebMD. The rate of problems related to the surgery was very low, he says.

Free Of Prostate Cancer 10 Years Later

Among 88 men enrolled in the study, 85 percent remained free of prostate cancer for a decade after having the freezing treatment, known as cryoablation or cryosurgery. This is the longest follow-up study of this prostate cancer treatment reported to date. And the long-term side effects of cryoablation also compared favorably to more established prostate cancer treatments.

While all men were impotent immediately after having the procedure, about a third regained some natural potency without the aid of drugs within a year, Derrick says. Just 2 percent of the men had severe urinary incontinence, but 8 percent had some lesser degree of leakage.

The study was funded by Endocare Inc., which manufactures a new generation of the guided probe machine used in the new prostate cancer treatment. It included prostate cancer patients treated with cryoablation between 1994 and 2004 at Roper Hospital. The study was presented March 3 at a regional meeting of the American Urological Association in Charleston.

Cryoablation Not Popular

Although cryoablation has been around for decades, it has been slow to catch on as a prostate cancer treatment because complication rates were high with earlier versions of the technology. Cryoablation is suitable for men who have not previously received prostate cancer treatment and whose prostate cancer has not spread. Men who have already been treated with radiation can also receive cryoablation as long as the cancer has not spread.

The procedure involves inserting thin, temperature-controlled probes through the skin and into the prostate gland. In most cases the entire prostate is frozen, but researchers are also experimenting with directly targeting the cancer in men with single tumors.

Cryoablation Needs More Time

American Urology Association spokesman J. Brantley Thrasher, MD, tells WebMD that cryoablation is one of several emerging prostate cancer treatments that could eventually prove superior to traditional surgery and radiation. "In the case of cryoablation the problem is that these new machines haven't been out long enough to give us good long-term data on their effectiveness," he says. "Before this is widely adopted, most academic centers and urologists are going to want to see this."

But Thrasher says more and more men are open to new prostate cancer treatments, especially if they prove to have fewer long-term side effects. "They want the long-term cure, but there is also an increasing understanding of quality of life issues in the treatment of prostate cancer," he says. "A minimally invasive approach like this one is very appealing. We just need more data to be able to adequately answer our patients' questions." (*WebMD / *Sources: * 69th Annual Meeting of the South East Section of the American Urological Association, Charleston, S.C., March 3, 2005.*)

Study provides insights on why some prostate cancer becomes resistant to hormone withdrawal therapy

SEATTLE -- A new study by scientists at Fred Hutchinson Cancer Research Center provides insight into why some men develop aggressive prostate cancer that becomes resistant to hormone-withdrawal therapy, a common form of treatment.

Researchers found that certain mutations in a protein called the androgen receptor cause advanced and invasive prostate cancer when put into otherwise healthy mice. The androgen receptor's normal function is to control growth of the prostate gland in response to cues from male hormones called androgens, which have long been thought to stimulate prostate tumors.

Because similarly defective androgen receptors have been found in prostate-cancer patients whose disease is resistant to hormone withdrawal, the finding sheds light on why most men with advanced prostate cancer treated with hormone-withdrawal therapy fail to be cured. The work opens the door to discovery of new, more effective therapies, according to Norman Greenberg, Ph.D., a member of Fred Hutchinson's Clinical Research Division.

The study is published in the Jan. 25, 2005 issue of the Proceedings of the National Academy of Sciences. The study was led by Dr. Guangzhou Han and colleagues. Greenberg

said that despite these and other earlier findings indicating a strong relationship between the androgen receptor and prostate cancer, no group had proved that it could be a key driver of disease.

"Our study is the first to demonstrate that if the androgen receptor acquires certain mutations, it can cause prostate cancer in otherwise healthy mice," he said. "Because very similar mutations have been found in androgen receptors from prostate-cancer patients whose disease is resistant to hormone-withdrawal therapy, we think this is a very significant finding."

The results suggest that prostate-cancer prevention trials involving drugs that lower a man's androgen levels should proceed cautiously, since complete androgen withdrawal seems to provide an environment that favors the development of the cancer-causing mutations. In addition, the work is the first to show that a class of proteins called steroid receptors, of which the androgen receptor is a member, can become cancer-causing genes known as oncogenes. The estrogen and progesterone receptors--two receptors that become defective in many breast cancers--are also members of this protein family.

The androgen receptor is a protein produced by prostate cells that binds to androgens, a family of chemically related hormones that includes testosterone. Although the binding of androgens to the receptor is important for healthy prostate development, the hormones may, under some conditions, stimulate the prostate-tumor cells to divide. For that reason, many men with advanced prostate cancer are treated with drugs that either block the production of androgens or the ability of the androgens to interact with their receptor.

About 90 percent of the time, prostate tumors shrink after hormone deprivation, but in most cases, it is believed that a small percentage of the tumor cells become resistant. Eventually, these resistant cells grow to become the predominant cancer, and no successful therapies have yet been developed for men with the hormone-withdrawal-resistant form of the disease.

In their study, researchers identified several mutations that impair the ability of the androgen receptor to interact with proteins called co-regulators. Co-regulators help the receptor to carry out its functions at the proper time; therefore, lack of interaction between the receptor and the appropriate co-regulators is thought to spur cancer development. Analogous mutant receptors also have been found in human prostate cancers.

Researchers wondered what would happen if they put the mutant receptors into otherwise healthy mice that also contained a normal version of the androgen receptor. They found that 100 percent of the time, the addition of one particular mutant receptor cause rapid development of a precancerous condition that progressed to advanced disease. In contrast, mice with extra copies of a normal receptor, as well as mice with the normal receptor and an unrelated type of mutant receptor, did not cause cancer.

"This demonstrates a causal role for certain androgen receptor mutations in prostate cancer," Greenberg said. Not all men with hormone-withdrawal-resistant disease develop such mutations, Greenberg said. Yet hormone-deprivation treatment can create a situation in some prostate tumors in which such mutations give a growth advantage to cancer cells.

Such mutant receptors might prove to be good drug targets, Greenberg said.

"These and other mutant forms of the receptor should be potential targets for new drugs that will be particularly effective in men whose cancers have these mutations and related events," he said. Because androgen deprivation has numerous side effects--including bone loss and sexual dysfunction--drugs that specifically attack the cancer-causing protein would be much more desirable than existing therapies. Drugs that effectively work against certain mutant proteins have been developed for other cancers, including Iressa for lung cancer and Gleevec for chronic myeloid leukemia.

Since the mutations Greenberg's lab studied appear to affect one specific function of the androgen receptor, it may also be possible to develop drugs that target other proteins that collaborate with the androgen receptor in this pathway. Greenberg's lab is now studying this pathway, with the hope of providing more insight into the drug discovery process.

(Fred Hutchinson Cancer Research Center, home of three Nobel laureates, is an independent, nonprofit research institution dedicated to the development and advancement of biomedical research to eliminate cancer and other potentially fatal diseases. Fred Hutchinson receives more funding from the National Institutes of Health than any other independent U.S. research center. Recognized internationally for its pioneering work in bone-marrow transplantation, the center's four scientific divisions collaborate to form a unique environment for conducting basic and applied science. Fred Hutchinson, in collaboration with its clinical and research partners, the University of Washington and Children's Hospital and Regional Medical Center, is the only National Cancer Institute-designated comprehensive cancer center in the Pacific Northwest and is one of 40 nationwide. For more information, visit the center's Web site at www.fhcrc.org <<http://www.fhcrc.org>>.)

SERUM PSA LEVELS DECLINE IN ANTILEUKEMIC CHEMOTHERAPY PATIENT

Original Source: /*Lab Business Week***/Original Date of Publication:/* 02.13.2005*

Researchers from Louisiana State University reported in Urology on the case of a hormone-refractory prostate cancer patient undergoing an antileukemic chemotherapy regimen that resulted in a decline in the patient's serum prostate-specific antigen levels.

O. Sartor and colleagues reported in Urology, "Our patient was a 61-year-old man with hormone-refractory prostate cancer and a rapidly rising serum prostate-specific antigen level. "During the course of therapy for prostate cancer, abnormal blood counts and subsequent bone marrow biopsy led to a diagnosis of acute lymphoblastic leukemia."

According to the researchers, "He was treated with a chemotherapeutic regimen in standard use for lymphoblastic leukemia, which resulted in an unusual response of his prostate cancer, with declining serum prostate-specific antigen levels that had reached undetectable levels at the time of the patient's death from acute sepsis and leukemic relapse."

"Autopsy showed minimal evidence of prostate cancer, localized to the prostate," Sartor and coauthors concluded. Sartor and colleagues published the results of their research in Urology (Unexpected response of hormone-refractory prostate cancer to treatment with an antileukemic chemotherapy regimen. Urology, 2004;64(4):U21+).

EARLY TEST FOR TESTICULAR CANCER

Researchers say they have discovered a method of detecting early signs of testicular cancer before it spreads. A team in Copenhagen discovered the disease could be diagnosed early by testing semen samples. They hope their find will lead to the development of a simple screening test for men at risk. (*Adelaide Advertiser*, 4/3, p30)

PROSTATE CANCER, UNTREATED

*(AP) *Early-stage prostate cancer can lie in wait for more than a decade and then flare up to kill a man, a Swedish study finds. The study, which followed 223 men whose early stage prostate cancer was left untreated, found that the tumor could become much more aggressive after 15 years - a follow-up period much longer than that done in most such studies.

As expected, the study found a high death rate in the earlier years for men with tumors that were fast-growing at the time of diagnosis, and a low death rate in those with less aggressive cancers.

But then came the flare-up. "The prostate cancer mortality rate increased from 15 per 1,000 person-years during the first 15 years to 44 per person-years beyond 15 years of follow-up," said a report in the June 9 issue of the *Journal of the American Medical Association* by researchers at Orebro University Hospital in Sweden.

Despite those dire numbers, the results do not necessarily cast doubt on the policy of watchful waiting for many patients with localized prostate cancer detected at an early

stage, said Dr. Victor R. Grann, clinical professor of medicine and epidemiology at Columbia University and co-author of an accompanying editorial. One reason is that the study included a relatively small number of patients, he said. Only 49 of the participants were still alive after 15 years.

But more importantly, the Swedish study began well before the use of advanced techniques such as magnetic resonance imaging to assess the malignancy of a tumor and, especially, before physicians began monitoring the status of prostate cancer by measuring blood levels of prostate-specific antigen (PSA), with increased PSA levels a warning sign of problems, Grann said. The patients were recruited between 1977 and 1984. "PSA testing may have picked up the progression of the disease earlier," Grann said.

Watchful waiting might not be appropriate for younger patients, such as men in their 50s, he said. But those 70 and older could be spared the side effects of treatment, with the knowledge that a flare-up probably will not occur for at least a decade, Grann said.

The real implications of the Swedish study apply to current studies in which PSA screening is being used to monitor men with diagnosed prostate cancer, he said. The study indicates the need for following those patients for much longer than has been the rule, Grann said. "The message of the study is that you can't tell anything about prostate cancer with a follow-up of five years," he said. "You need to follow patients for longer than five years, probably even longer than 10 years."

The need for such a long follow-up is a challenge to current practice, the editorial said. "It is difficult to think in terms of conducting a randomized trial for screening with a horizon of 15 to 20 years, but perhaps that is exactly what will be necessary to really observe the impact of PSA screening on prostate cancer," it said. (By Ed Edelson @MMIV, The Associated Press)

OBESITY RAISES PROSTATE CANCER RISK

04/02/2005 - *Obesity not only raises the risk of heart disease, diabetes and blood pressure, but also makes the likelihood of developing prostate cancer more likely, say Portuguese researchers.*

Abdominal obesity has long been associated with an increase in heart-related conditions and some types of cancers but until now, it has not been possible to establish a relationship between prostate cancer and weight, even if evidence supports the idea that environmental factors, such as western diet and life style, affect the incidence of the disease. But a new study, published in the December issue of /Obesity Research/ (pp1930-5), shows that visceral fat, or the fat found around organs, is associated with increased danger of prostate cancer.

The finding has major implications given today's rise in obesity. Almost one third of people living in the European Union are overweight and more than one in ten is now obese, according to European Association for the Study of Obesity. Moreover the number of children who are overweight is set to rise from 20 per cent to 25 per cent by 2008. The study also shows that risk of obesity-related disease depends on types of fat.

Different types of fat tissue, because they possess different types of metabolism that produce different biochemical substances, affect the body in very different ways. Adipose tissue in the human body comes in two types: subcutaneous fat which is located just below the skin, and visceral fat, which is located, unnoticed, below the muscles surrounding vital organs.

This fat is considered much more harmful than subcutaneous adiposity as it is known to predispose to cardiovascular and metabolic problems, although the mechanism(s) by which these complications appear is still not known.

Pedro Von Hafe, Henrique Barros and colleagues from the Faculty of Medicine of Porto and the Hospital of São João, Porto, Portugal used computerized axial tomography, a

technique that employs advanced x-ray technology and allows to distinguish, and individually measure, different types of adipose tissue.

They compared 63 prostate cancer male patients with the same number of healthy controls from the same ethnical background and with similar age, height and weight. It was found that higher quantities of visceral fat, but not of subcutaneous fat, were associated with prostate cancer. The quantity of visceral fat, however, did not correlate with the disease stage, indicating that once established, other factors contribute to the evolution of disease.

The different results found between visceral and subcutaneous fat, probably result from different biochemical substances produced by each of the adipose tissue, which will affect the body in different ways. Furthermore, the researchers note that visceral fat tends to be metabolised by the liver into fatty acids and released into the blood, ultimately leading to an increase of insulin. Insulin is known to be capable of inducing the growth of carcinogenic cells, including cells from prostate tumours.
<http://www.nutraingredients.com/feedback/index.asp?type=1&page=%2Fnews%2FprintNewsBis%2Easp%3Fid%3D57857>

PROMISING PROSTATE CANCER THERAPY

*(AP) *Men with prostate cancer that doesn't appear to have spread have better survival chances when they get short-term hormone treatment along with standard radiation, rather than radiation alone, a small study found. Almost five years after treatment, six men in the radiation-only study group died of prostate cancer; none of the men who got combined treatment died of prostate cancer. The study involved about 200 men.

Of the more than 200,000 U.S. men diagnosed each year with the disease, nearly half have the kind cancer involved in the study: An exam and imaging indicates it hasn't spread but other tests indicate it might have.

Treatment for such men often involves radiation alone or radiation combined with long-term use of hormone-fighting drugs, often for as long as three years or more. But long-term drug use may cause thinning bones, heart abnormalities that can lead to sudden death and impaired mental function.

The study found that using hormone-blocking drugs for six months had the same survival benefits as long-term use but without the potential health risks. Some men did have side effects including impotence, but that can occur with other prostate cancer treatments, including surgery and radiation.

"It's a very important and useful study and should have nearly immediate impact on the fashion in which men are treated," said Dr. Durado Brooks, director of prostate cancer programs at the American Cancer Society <<http://www.cancer.org>>. "Significant numbers of men are getting radiation only," Brooks said. That's partly because many men reject hormone-suppressing drugs when they learn about all the bad side effects from long-term treatment, he said. Brooks said radiation plus short-term medication is likely to become prevalent given the study results.

Researchers studied 206 men aged 49 to 82 randomly assigned to receive about seven weeks of daily radiation treatments, or radiation plus six months of medication overlapping the radiation treatment. Six of those only on radiation died from prostate cancer while none of those getting combined treatment died from prostate cancer. More than twice as many radiation-only men had evidence of cancer recurrence, 46 versus 21 in the combined treatment group.

The patients had prostate cancer that physical exams and imaging tests indicated had not spread. But they also had high blood levels of PSA - prostate specific antigen - and high Gleason scores, which measure the degree of abnormality found in cancer tissue. The high levels raise the possibility of cancer elsewhere, said lead author Dr. Anthony D'Amico, a radiation oncologist at both institutions.

The drug treatment studied involved flutamide pills three times daily with periodic injections of either leuprolide acetate or goserelin. The drugs suppress production of testosterone, which can fuel prostate cancer growth.

Men in the drug-radiation group had more severe impotence and more breast tissue enlargement than the radiation only group. But they had no obvious evidence of the

potentially more debilitating complications of long-term treatment. Although those weren't specifically measured, they usually don't appear until after at least a year of treatment, D'Amico said.

In a JAMA editorial, Dr. Theodore DeWeese of Johns Hopkins University, said the study did not address how the drug treatment affected patients' quality of life. He also said the radiation dose was lower than is frequently given, which might explain the differing survival rates. Still, he called the study "extremely important" because of the survival advantage shown.

The study by researchers at Boston's Brigham and Women's Hospital and Dana Farber Cancer Institute appears in the Journal of the American Medical Association <<http://jama.ama-assn.org>>.©MMIV, The Associated Press.

RADIATION "SEED THERAPY" BEATING PROSTATE CANCER

Robert Preidt(HealthDay News) -- A long term study finds radiation "seed therapy" used to fight prostate cancer achieved cure rates equal to, or better than, traditional surgery. The treatment -- known to doctors as brachytherapy -- is a form of radiation therapy where surgeons implant rice-sized radioactive seeds inside the body.

The positive findings of the 12-year study "demonstrates that brachytherapy should be offered without bias to all men with early organ-confined (stage T1 and T2) prostate cancer," researcher Dr. Jerrold Sharkey, a professor of urology at the University of South Florida, said in a prepared statement.

The study, published in the current issue of /Brachytherapy/, reviewed data on more than 1,700 prostate cancer patients with non-metastatic disease treated between 1992 and 2004 at the Urology Health Center in Greater Tampa, Fla.

Of those patients, 1,380 (more than 80 percent) were treated with brachytherapy, while the rest received traditional prostatectomy surgery. The study found that high-risk prostate cancer patients treated with the radioactive seeds had an 88 percent cure rate, compared with a 43 percent cure rate for those who had surgery. Intermediate-risk prostate cancer patients treated with brachytherapy had an 89 percent success rate, compared with 58 percent for those treated with surgery.

Low-risk patients treated with brachytherapy had a success rate of 99 percent vs. 97 percent for those who had surgery, the researchers found.

The seed procedure is steadily becoming more common: A recent Gallup poll of urologists found that the percentage of them performing brachytherapy in patients with prostate cancer rose from 16 percent in 1997 to 56 percent by 2003.

SOY IMPROVES PROSTATE OUTLOOK

*(WebMD) *A soy-rich diet, thought to prevent the development of certain cancers, may improve the prognosis for men diagnosed with prostate cancer. And the effect seems to be immediate.

Studies have found that adding about 2 ounces of soy grits a day to the diets of men diagnosed with prostate cancer caused a quick and noticeable improvement in their PSA levels. PSA, or prostate-specific antigen, is commonly used to screen for prostate cancer and for tracking the disease once it's been found.

In the latest study, Australian researchers find that adding about 2 ounces of soy each day for one month results in a 13 percent drop in total PSA and a 27 percent increase in the free-to-total PSA ratio in men with prostate cancer.

PSA exist in two forms, one bound to proteins and one that is free. Many studies have suggested that men with prostate cancer have lower free PSA levels and lower free-to-total PSA ratios, making the ratio a more specific measure of prostate cancer.

The 29 men, who were scheduled for radical prostatectomy, ate the soy in four slices of bread containing soy grits - soybeans that have been toasted and cracked into coarse pieces and eaten as a cereal or added to recipes.

They were compared to other men who ate either wheat grains not enriched with soy or a combination of soy and linseed. Their total PSA scores worsened by 40 percent and 21 percent, respectively. Their free-to-total PSA level worsened by 16 percent and 10 percent, respectively.

Soy Shakes Help, Too

This research, by scientists at Monash University, follows another study published in the May issue of the journal *Prostate* showing a reduction in PSA levels among men with early-stage prostate cancer - the "watch and wait" category for this often slow-growing cancer - who drank a little over 2 ounces of soy daily in a milkshake. In that three-month study, 20 percent of those men had a PSA drop of 3 or more points.

The suspected benefit from soy comes from its high amounts of isoflavones, phytochemicals believed to help prevent the development of certain types of cancer, including breast cancer. "The way I explain it is that the isoflavones in soy keep cells from going rowdy," says researcher Nagi B. Kumar, PhD, RD, of the Moffitt Cancer Center in Tampa, who headed that study in *Prostate*. "Most cells function, mature, and eventually die off. But some cells are mutated, and they proliferate in a way that's pointless, progressive, and wild. That's what causes cancer, and soy seems to help stop this."

Quick Results

Kumar says she's not surprised by her findings or by the Australian findings showing PSA improvement, since many previous studies have indicated that a soy-rich diet can prevent cancer development.

"But I am surprised at the results observed after only one month," she tells WebMD of the Australian study. "That's pretty remarkable when you consider this disease has a long latency period? there's something like 16 to 20 years before you see evidence of prostate cancer. If men regularly consume this amount of soy over a lifetime, it has the promise of significantly reducing their risk of prostate cancer."

Her advice: Eat like Japanese men, who have one of the world's most soy-rich diets and lowest rates of prostate cancer. "That means eating about 2-3 ounces of soy, three or four days a week by way of food, not supplements," she says. "Soy grits are a very good form, but we especially recommend fermented products like soy milk, because they are better absorbed in the gut."

**/SOURCES*/: Dalias, F. Urology, September 2004; vol 64; pp 510-515. Kumar, N. Prostate, May 2004; vol 59; pp 141-147. Nagi B. Kumar, PhD, RD, director of nutrition and cancer control researcher, Moffitt Cancer Center; associate professor, University of South Florida College of Medicine, Tampa./*

PROSTATE CANCER A SIGNIFICANT FACTOR FOR LATE-LIFE SUICIDE

** Maria D. Llorente, M.D., Michael Burke, M.D., Gladys R. Gregory, M.D., Hayden B. Bosworth, Ph.D., Steven C. Grambow, Ph.D., Ronnie D. Horner, Ph.D., Adam Golden, M.D., and Edwin J. Olsen, M.D., M.B.A., J.D. *© 2005 American Association for Geriatric Psychiatry*

Objective: The authors sought to determine the incidence of suicide and its relevant correlates among men with prostate cancer.

Methods: This was a population-based, retrospective cohort review of men age 65 and older, residing in South Florida between 1983 and 1993. Average annual suicide rate was calculated for prostate cancer-related suicides and contrasted with age and gender-specific rates in the same geographic area.

Results: Of 667 completed suicides, 20 were prostate cancer-related (3% of the total male suicide sample). The average annual incidence of suicide for men was 55.32 per 100,000 persons, but for men with prostate cancer, the rate was 274.7 per 100,000. The risk of suicide in men with prostate cancer was 4.24 times that of an age- and gender-specific cohort. The clinical correlates included depression (70%), cancer diagnosis within 6 months of suicide (80%), physician visit within 1 month of suicide (60%), and being foreign-born (70%).

Conclusion: The incidence of suicide among older men with prostate cancer is higher than previously recognized. Depression, recent diagnosis, pain, and being foreign-born are important clinical correlates. Screens for depression and suicide in older men with

prostate cancer should be done after diagnosis and redone during the first 6 months regularly, particularly in the primary-care setting. Public education is needed to decrease the stigma associated with having a cancer diagnosis.

TECHNIQUE IMPROVES PROSTATE CANCER TREATMENT

Mar. 9 (ABC7) If a man is diagnosed with prostate cancer, he faces a confusing array of treatment choices. One increasingly popular therapy involves implanting radioactive seeds in the prostate. But placement of the seeds can be tricky. Dr. Dean Edell reports on a new technique that may help improve accuracy. Many patients fighting early stage prostate cancer receive radiation therapy instead of surgery. Tiny pellets- or seeds - are implanted directly in the prostate.

Eva Lee, researcher: "The radioactive seeds are slowly releasing the radiation inside the tumor."

Radiation oncologists typically implant 60-200 seeds. The placement of those seeds dictates how much radiation is delivered to the cancerous cells. Determining the proper positions is critical.

Eva Lee, researcher: "The trick here is to how to place the seeds in the optimal way, so that we get the best clinical results."

Researcher Eva Lee believes she's found a way to help determine the best seed locations by using sophisticated math. She's created a software program that takes a three-dimensional ultrasound image and optimizes it, giving doctors the high quality pictures they need for the most accurate plan of attack.

Eva Lee, researcher: "Using the mathematical approach, we are able to come up with plans that provide good coverage to the tumor, and at the same time reduce the toxicity to the critical structures."

The software program also allows doctors to make adjustments during implantation.

Eva Lee, researcher: "We can actually design the plan on the spot during implantation. As the clinician places the seeds inside, they can look up at those and make changes."

Ariela Sofer, researcher: "It will help doctors in giving better treatment that prolongs the life of the patient, that saves the patient from detrimental side effects."

So far, this new software program seems to improve the accuracy of the seed placement while reducing damage to the surrounding tissue. Better still, it is producing a lower risk of side effects - such as impotence and incontinence.

To date, this placement system has been tested on more than 200 patient cases. The data is now being prepared for FDA evaluation.

*More Information http://abclocal.go.com/kgo/health/edell/030905_he_prosseeds_research.html

EXERCISE MAY HELP CANCER PATIENTS RECUPERATE

Low blood counts, lack of sleep, pain and stress often leave cancer patients with overwhelming fatigue during therapy.

When Dick Yolevich is not poolside having coffee with his wife, he is inside working hard to fight fatigue. I hope that my experience is indicative of what it's going to do for other people, says Dick Yolevich

The prostate cancer patient is in a study to see if exercise helps patients avoid fatigue during radiation treatments. Doctors typically tell weary cancer patients to relax, take it easy. Now new research suggests the opposite.

What we actually see is if you can get up and get moving even just a little bit, there are some positive things that occur systemically in the body which actually can help alleviate some of that fatigue, says Karen Mustian, PhD.

Participants in the University of Rochester study include breast and prostate cancer patients who have been scheduled for at least 30 radiation treatments.

"The activities that we're having them do are considered very low to moderate intensity activities like walking, says Karen Mustian, PhD.

Along with some resistance training, even a little workout boosts his energy says Dick Yolevich . This is a fatigue that doesn't go away with sleep. It just hangs on and fortunately, I didn't experience any of that. With results like that, the day may come when cancer doctors prescribe exercise as often as heart doctors.

I would say that probably in 20 years, you will see programs very similar to cardiac rehabilitation programs where it will be a common part of your treatment, Karen Mustian, PhD says.

Previous studies have shown that cancer patients with fatigue who are inactive can actually feel worse. As always, if you think you want to start an exercise program ask your doctor for guidelines. (*© MMV, CBS Broadcasting Inc., All Rights Reserved*)

CAUSE FOR HOPE IN BATTLE AGAINST PROSTATE CANCER

New frontiers have suddenly opened up in the treatment of advanced prostate cancer. Since the arrival of a new form of chemotherapy last June, several more developments have followed, raising the possibility of extending the lives of men with this cancer.

The new treatments look promising. They appear to increase survival rates and cause fewer side effects. Manish Patel, a consultant cancer urologist at Westmead and Sydney Adventist Hospitals, describes them as "really impressive".

He was at the American Clinical Oncology meeting in the US last June when docetaxel, the new chemotherapy agent for prostate cancer, made its debut. News of it spread around the world and, since then, the drug has been approved in Australia and is used here.

Patel says researchers quickly postulated that if docetaxel was good by itself, it would probably be even better if boosted by other drugs.

Two weeks ago, he was back in the US at a multidisciplinary prostate cancer symposium that was full of surprises. One was a study showing that a combination of docetaxel and thalidomide almost doubled survival. But the biggest surprise at the US symposium was the presentation of a prostate vaccine that worked. Not only did it appear to extend survival but it had very light side-effects. Called Provenge, it was shown to provide a survival advantage of four and a half months. (*AFR, 3/3, p59*)

Compiled by *Trevor Hunt*